GZA
GeoEnvironmental, Inc.

Engineers and Scientists

August 28, 1997
File No. 26020.1

Mr. Carl Ruprecht
S. B. Collins
P.O. Box 671
St. Albans, Vermont 05478

Re: Supplemental Investigations
Shirley's Trading Post [Sites Management Section (SMS) Site No. 97-2147]
Route 22A
Benson, Vermont

380 Harvey Road
Manchester
New Hampshire 03103-3347
603-623-3600
FAX 603-624-9463
http://www.gza.net

Dear Mr. Ruprecht:

GZA GeoEnvironmental, Inc. (GZA) is pleased to submit to S. B. Collins (SBC) this letter report with respect to the above-referenced project. The work was carried out in accordance with our April 1997 contract, the Work Plan approved by the State of Vermont Agency of Natural Resources (ANR) SMS, and the ANR Site Investigation Guidance dated August 1996. The objectives of this work were to collect additional groundwater and soil information at the Peter's Country Store site (formerly Shirley's Trading Post, and to render an opinion about the appropriate conceptual remedial approach for the site. A locus map is provided as Figure 1. The methodology, results, and conclusions of this investigation are subject to the Limitations provided in Appendix A.

BACKGROUND INFORMATION

A Subsidiary of GZA GeoEnvironmental Technologies, Inc.

GZA completed a Site Investigation in December 1996 to evaluate groundwater and soil conditions at the site. The site investigation included a site reconnaissance, review of site history, a preliminary potential receptor survey, a subsurface exploration program consisting of the installation of four monitoring wells, the sampling of four existing and four newly-installed monitoring wells, and the analysis of soil and groundwater samples. The quantitative laboratory analytical data and field screening data indicated the presence of certain petroleum-related compounds in groundwater samples collected from certain on-site monitoring wells in exceedance of Chapter 12 Vermont Groundwater Standards at the site. Supplemental sampling work at the site identified floating product in monitoring well SBC-1 thereby indicating the presence of free phase product in close proximity to the existing underground storage tanks (USTs).

Following review of GZA's Site Investigation and supplemental work, ANR requested additional work at the site including the installation of an additional overburden monitoring well between monitoring well SBC-1 and the on-site bedrock water supply

well, obtaining additional information regarding the on-site bedrock water supply well, performing ambient air screening within the on-site buildings, and conducting free phase product recovery. Results of the additional work are included in this report.

SUPPLEMENTAL INVESTIGATIONS

INSTALLATION OF ADDITIONAL MONITORING WELL

One test boring (GZ-5) was drilled by Great Works Test Boring, Inc. (Great Works) between existing monitoring well SBC-1 and the existing bedrock water supply well on June 6, 1997 using a truck-mounted drill rig. Standard Penetration Tests (SPTs) were conducted at 5-foot intervals to collect soil samples and to collect data regarding the in-place density of soils. The test boring was advanced to a depth of about 12 feet below ground surface. Groundwater was encountered at a depth of about 6 feet below ground surface. The test boring and monitoring well installation was observed and logged by GZA. The location of the newly-installed and existing monitoring wells are shown on Figure 2. The boring log is included in Appendix B.

Great Works also installed protective road boxes on the existing monitoring wells SBC-1 through SBC-4.

SOIL AND GROUNDWATER SAMPLING AND ANALYSIS

Soil Sampling and Screening

Soil samples collected during SPT testing were classified by GZA, and a portion of each soil sample was placed in a clean glass jar. GZA conducted head-space screening for volatile organic compounds (VOCs) of each of the soil samples using a photoionization detector (PID) referenced to an isobutylene-in-air standard. The purpose of the field screening was to assess the possible presence of VOC vapors in the headspace of the containerized soil samples which may indicate possible soil contamination. PID readings are not considered to represent actual concentrations of VOCs in a sample; however, the readings are useful as a guide for determining if additional laboratory analysis is warranted. Field screening results are included in the "Field Test Data" column of the attached boring log. No VOCs were detected in the soil samples from GZ-5, and no soil samples were submitted for laboratory analyses.

Groundwater Levels

GZA recorded depth to groundwater in all on-site monitoring wells on June 6, 1997. Groundwater elevations and monitoring well reference elevations are included in Table 1. Groundwater elevation contours interpreted from the data are illustrated on Figure 2. The data indicates that the direction of groundwater flow is to the northeast.

Groundwater Sampling and Analysis

GZA collected one water sample from the on-site bedrock water supply well. The sample was obtained from a tap located adjacent to the water storage tank in the basement of the on-site building. This containerized sample was sent to Endyne, Inc. of Williston, Vermont for analysis for VOCs by United States Environmental Protection Agency (EPA) Method 524. The analytical laboratory report is contained in Appendix C.

Following monitoring well installation, GZA purged approximately three well volumes from the newly-installed monitoring well GZ-5. Groundwater samples were collected from monitoring wells GZ-1 through GZ-5 and SBC-2 through SBC-4, and transferred to pre-preserved containers. No samples were collected from SBC-1 due to the presence of floating product in the well. The containers were placed in an ice-filled cooler and transported to Endyne Inc. of Williston, Vermont for analysis for VOCs by EPA Method 8020. The analytical laboratory report is included in Appendix C.

Results of Laboratory Analysis

The results of the laboratory analysis for groundwater samples collected by GZA are summarized in Table 2.

As indicated in Table 2, with the exception of GZ-3, petroleum-related VOCs were detected within each of the monitoring wells at concentrations exceeding Vermont Enforcement Standards. The highest concentrations of VOCs were detected in groundwater samples collected from SBC-4, which is situated in close proximity of the two on-site USTs. No VOCs were detected in the sample collected from the bedrock water supply well.

BEDROCK WATER SUPPLY WELL RESEARCH

GZA contacted Ms. Shirley Valadyka, the current owner of the site, to obtain information pertaining to the construction of the bedrock water supply well. Ms. Valadyka did not have specific information pertaining to the construction of the well, however, she indicated that Prentice Smith installed the well for the former owners of the property, Thomas and Madeline Purdy. GZA has not been able to make contact with Mr. Smith as of the date of this report.

GZA also contacted Ms. Marion Okuszki at the ANR Water Bureau. Ms. Okuszki indicated that ANR maintain a database of information pertaining to private water supply wells in Vermont, and that the original owner's name is required to access the information. GZA provided Ms. Okuszki with the necessary information to search the database, and according to Ms. Okuszki, no information regarding the on-site bedrock water supply well is on record with ANR.

AMBIENT AIR SCREENING

GZA screened the ambient air within the on-site building for the presence of VOCs indicative of gasoline vapors with a portable organic vapor meter equipped with a PID. The screening was performed in three separate locations within the building: in the basement, in the retail portion, and in the living area. No elevated VOCs were detected within any of the locations screened.

FREE PHASE PRODUCT RECOVERY

GZA performed a manual free phase recovery test in monitoring well SBC-1 on June 6, 1997. Prior to product recovery, the water level depth and product thickness was measured with an oil/water interface probe. Product depth was measured at 6.42 feet, and groundwater was measured at 6.70 feet below ground surface. Following measurement of water and product levels, approximately one pint of gasoline product was recovered from the well with a disposable bailer. One inch of floating product was measured following the product recovery attempt. The following table presents the depth to product and depth to water measurements with respect to time.

TIME (MINUTES) AFTER PRODUCT REMOVAL	PRODUCT DEPTH (FEET)	WATER DEPTH (FEET)	PRODUCT THICKNESS (INCHES)
Before Product Recovery	6.42	6.70	3.36
1	6.66	6.76	1.20
15	6.60	6.75	1.80
20	6.53	6.73	2.40
25	6.50	6.70	2.40
30	6.50	6.70	2.40

The data indicate that approximately 60% of the product in SBC-1 was removed with the initial bailer withdrawal. Further, approximately one half of the product extracted recovered in 20 minutes. In order to maximize product recovery, subsequent product recovery attempts were made on June 17 and 29, 1997 using absorbent materials. About one pint of gasoline product was recovered from SBC-1 on each occasion.

UST CLOSURE

Two gasoline USTs were removed from the ground at the site on August 6, 1997. GZA visited the site on August 7, 1997 to document the condition of the USTs, and to observe the subsurface conditions within the UST excavation.

Soil generated during UST excavation was stockpiled adjacent to the excavation and covered with 6-mil polyethylene sheeting. Soils within the excavation consisted of fine to medium sand with some gravel underlain by clay and silt. The excavated area was approximately 6 feet deep and was about 17 feet wide by 20 feet long. No groundwater was observed within the excavation. GZA noted a strong petroleum odor in the vicinity of the excavation.

GZA performed headspace field screening of soil samples collected from the excavation for the presence of VOCs using a Thermo Environmental, Inc. Model 580B organic vapor meter equipped with a PID. Concentrations of VOCs detected ranged from 111 to 1,108 parts per million. Following field screening of soils and observation of the excavation, the stockpiled soils were placed back in the excavation.

Tank No. 1, a 2,000-gallon gasoline UST, was observed to be in good condition, with no visible holes or excessive pitting noted. Tank No. 2, a 1,000-gallon gasoline UST, was observed to be in poor condition. Numerous small holes were observed on the bottom of Tank No. 2.

A UST closure report, including an Underground Storage Tank Permanent Closure Form was subsequently forwarded to ANR to document UST closure activities at the site.

CONCLUSIONS AND RECOMMENDATIONS

GZA has completed additional investigations to evaluate groundwater and soil conditions at Peter's Country Store in Benson, Vermont.

The quantitative laboratory analysis of soil and groundwater samples collected at the site confirms that a release of petroleum products to the environment has occurred elevating the concentrations of certain VOCs in groundwater above Vermont Enforcement Standards. The data collected indicates that the contamination detected is related to the discharge of petroleum products proximate to the on-site USTs possibly resulting from leaks or spills. Though contaminant concentrations are elevated proximate to the source area, analytical data indicate that the hydraulic properties of the soil have limited the degree to which the contaminates have migrated from the source area at this time. However, due to the detection of MtBE in a groundwater sample from GZ-4 collected at a greater distance from the USTs, it does appear that contaminant migration is occurring.

No VOCs were detected during ambient air screening performed in the basement, retail portion, and in the living area of the on-site building. Additionally, no VOCs were detected in a groundwater sample collected form the on-site bedrock water supply well.

Observations of USTs removed from the ground at the site on August 6, 1997, indicate that a 1,000-gallon gasoline UST (Tank No. 2) was in poor condition with numerous holes observed on the bottom. In GZA's opinion, removal of the UST represents removal of a significant source contributing to the groundwater contamination at the site.

GZA recommends continued monitoring of groundwater quality conditions at the site. Due to the removal of the UST source, and the limited degree that contaminants have migrated, GZA recommends a natural attenuation remedial approach for the site. This should include monitoring groundwater quality for gasoline-related VOCs as well as indicators of intrinsic bioremediation. Upon ANR agreement to this approach, GZA will develop a work plan and cost estimates for these recommendations.

GZA very much appreciates the opportunity to submit this report to S. B. Collins, and we trust that this letter report meets your needs at this time. Should you have any questions, please call us.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Jeffrey D. Rowell, E.I.T.
Assistant Project Manager

Steven R. Lamb, C.G.W.P.
Associate Principal

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Attachments: Tables
Figures
Appendices A, B, and C

cc: Mark Coleman, Vermont ANR

TABLES

TABLE 1
GROUNDWATER ELEVATIONS

Peter's Country Store
Benson, Vermont

Monitoring Well	Reference Elevation	Survey Reference Point	Depth to Groundwater (ft)	Groundwater Elevation (ft)
GZ-1	99.03	PVC	6.05	92.98
GZ-2	100.35	PVC	7.35	93.00
GZ-3	95.24	PVC	4.01	91.23
GZ-4	95.39	PVC	3.84	91.55

NOTES:

1. Groundwater measurements were recorded on June 6, 1997 by GZA using a Slope Indicator water level meter relative to the survey reference point.

2. Datum is the north corner of the front step at the entrance of Peter's Country Store with an assumed elevation of 100 feet.

3. "PVC" is the top of the PVC well riser pipe.

TABLE 2
GROUNDWATER QUALITY DATA

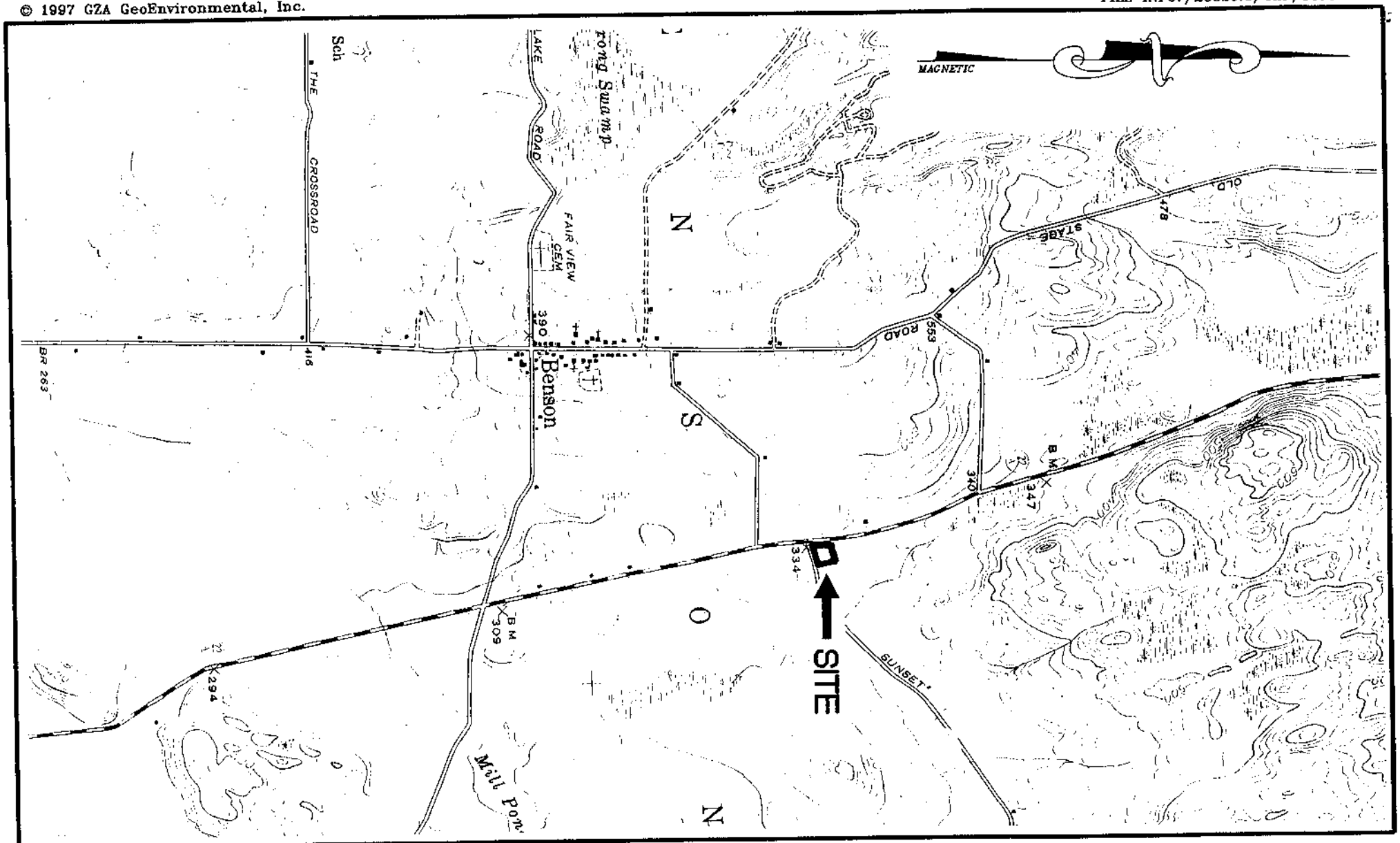
Peter's Country Store
Benson, Vermont

Parameter	Enforcement Standard	Water Supply Well	Monitoring Well							
			GZ-1	GZ-2	GZ-3	GZ-4	GZ-5	SBC-2	SBC-3	SBC-4
Benzene	5	BD	**4,110**	**43.7**	<1	<5	**718**	**72.3**	**1,140**	**17,300**
Chlorobenzene	100	BD	**<500**	<5	<1	<5	<100	<2	<100	**<2,500**
1,2 - Dichlorobenzene	600	BD	<500	<5	<1	<5	<100	<2	<100	**<2,500**
1,3 - Dichlorobenzene	600	BD	<500	<5	<1	<5	<100	<2	<100	**<2,500**
1,4 - Dichlorobenzene	75	BD	**<500**	<5	<1	<5	**<100**	<2	**<100**	**<2,500**
Ethylbenzene	700	BD	**1,040**	<5	<1	<5	**2,870**	81.5	441	**3,860**
Toluene	1,000	BD	**2,030**	<5	<1	<5	**13,000**	51.2	**2,150**	**37,600**
Xylenes	10,000	BD	3,450	<5	<1	<5	**15,100**	101	1,920	**24,800**
MtBE	40	BD	**22,300**	**<50**	<10	266	**TBQ <1,000**	**86**	**3,280**	**95,200**

NOTES:
1. Concentrations are in micrograms per liter or parts per billion (ppb).
2. "BD" indicates below detection limit for the parameter analyzed. "-" indicates parameter not analyzed.
3. Bolded entries indicate exceedences of Chapter 12 Vermont Primary Groundwater Quality Standards.
4. "TBQ" indicates that the compound was detected at a trace concentration below quantification limits.

FIGURES

FILE INFO: /26020.1/CAD/FIG1.DWG



PETER'S COUNTRY STORE

BENSON, VERMONT

LOCUS PLAN

PROJECT No.: 26020.1

FIGURE No.: 1

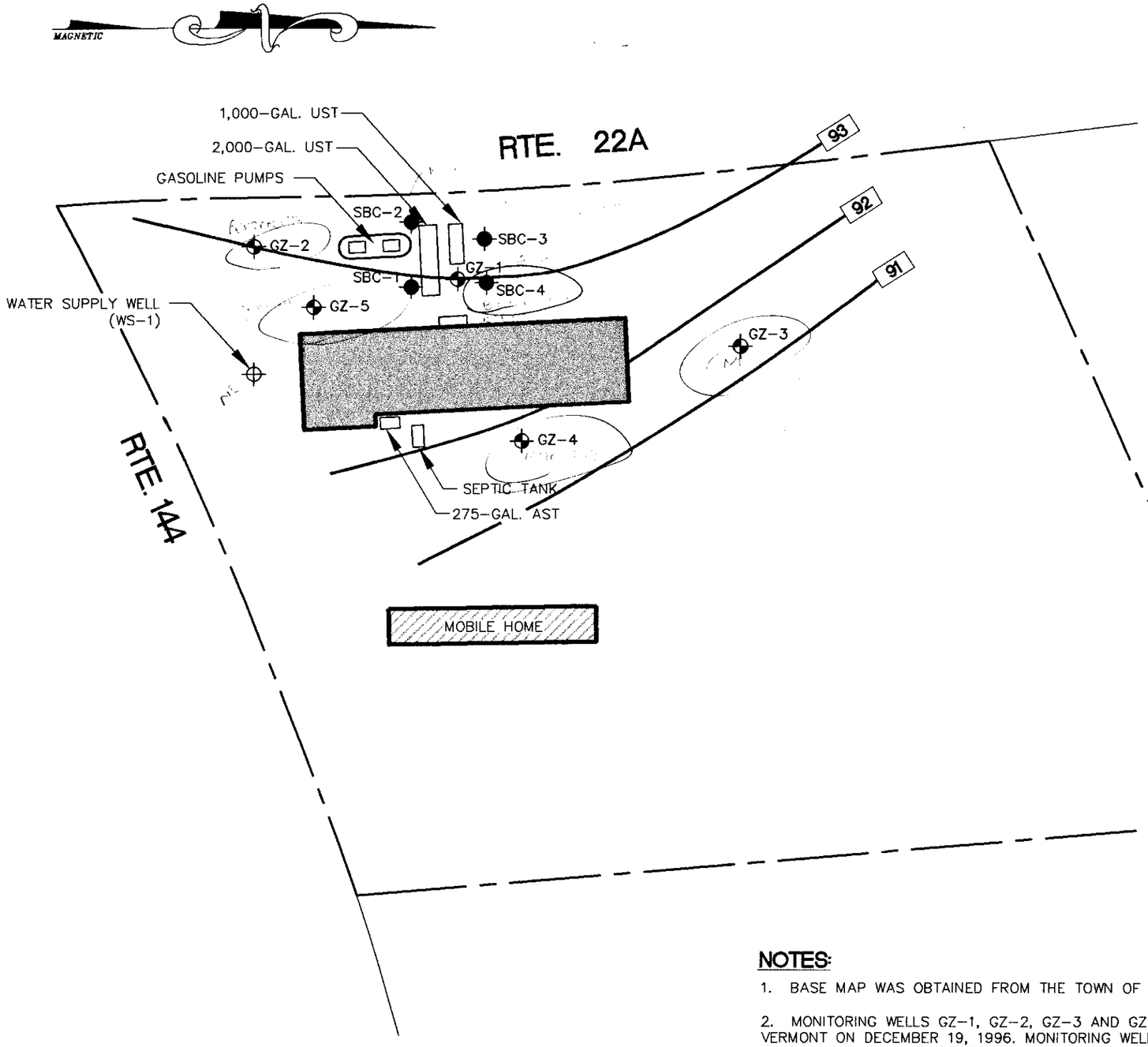
DES'D BY	: D.P.S.
CHK'D BY	: S.R.L.
APP'D BY	: S.R.L.
DRAWN BY	: M.A.N.
SCALE	: 1"=2000'
DATE	: JULY, 1997

APPROXIMATE GRAPHIC SCALE

2000' 0 2000' 4000'

GZA GeoEnvironmental, Inc.
Engineers and Scientists
380 HARVEY ROAD
(603) 623-3600 MANCHESTER, NEW HAMPSHIRE 03103

FILE INFO: /26020.1/CAD/FIG2



LEGEND:

- GZ-3 — GROUNDWATER MONITORING WELL AND DESIGNATION
- PROPERTY BOUNDARY
- GROUNDWATER ELEVATION CONTOUR
- BEDROCK WATER SUPPLY WELL
- SBC-4 — EXISTING MONITORING WELL

NOTES:

1. BASE MAP WAS OBTAINED FROM THE TOWN OF BENSON, VERMONT TAX MAP NO. 11.

2. MONITORING WELLS GZ-1, GZ-2, GZ-3 AND GZ-4 WERE INSTALLED BY TRI-STATE DRILLING INC. OF BARTON, VERMONT ON DECEMBER 19, 1996. MONITORING WELL GZ-5 WAS INSTALLED BY GREATWORKS TEST BORING, INC. OF ROLLINSFORD, NEW HAMPSHIRE ON JUNE 6, 1997. MONITORING WELL INSTALLATIONS WERE OBSERVED BY A GZA GEOENVIRONMENTAL, INC. ENGINEER. MONITORING WELLS SBC-1, SBC-2, SBC-3 AND SBC-4 WERE EXISTING AT THE TIME OF THIS STUDY.

3. LOCATION OF SITE FEATURES WERE DETERMINED USING CLOTH TAPE AND LINE OF SITE SURVEY METHODS. THE LOCATIONS SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

GRAPHIC SCALE 0' 40' 80'

GZA
GeoEnvironmental, Inc.
Engineers and Scientists
380 HARVEY ROAD
MANCHESTER, NEW HAMPSHIRE 03103
(603) 623-3600

DES'D BY : D.P.S.
CHK'D BY : S.R.L.
APP'D BY : S.R.L.
DRAWN BY : M.A.N.
SCALE : 1"=40'
DATE : AUG. 1997

PETER'S COUNTRY STORE
BENSON, VERMONT

SITE PLAN

PROJECT No.: 26020.1
FIGURE No.: 2

APPENDIX A

LIMITATIONS

GEOHYDROLOGICAL LIMITATIONS

1. The conclusions and recommendations submitted in this report are based in part upon the data obtained from a limited number of soil samples from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until further investigation. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the recommendations of this report.

2. The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples; actual soil transitions are probably more gradual. For specific information, refer to the boring logs.

3. Water level readings have been made in the test pits, borings and/or observation wells at times and under conditions stated on the exploration logs. These data have been reviewed and interpretations have been made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.

4. Except as noted within the text of the report, no quantitative laboratory testing was performed as part of the site assessment. Where such analyses have been conducted by an outside laboratory, GZA GeoEnvironmental, Inc. (GZA) has relied upon the data provided, and has not conducted an independent evaluation of the reliability of these data.

5. The conclusions and recommendations contained in this report are based in part upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made in the report. As indicated within the report, some of these data are preliminary "screening" level data, and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed by GZA, and the conclusions and recommendations presented therein modified accordingly.

6. Chemical analyses have been performed for specific parameters during the course of this study, as detailed in the text. It must be noted that additional constituents not searched for during the current study may be present in soil and groundwater at the site.

7. It is recommended that this firm be retained to provide further engineering services during design, implementation, and/or construction of any remedial measures, if necessary. This is to observe compliance with the concepts and recommendations contained herein and to allow design changes in the event that subsurface conditions differ from those anticipated.

APPENDIX B

BORING LOGS

GZA GeoEnvironmental, Inc.
Engineers and Scientists

PETER'S COUNTRY STORE
BENSON, VERMONT

Boring No.: GZ-5
Page: 1 of 1
File No.: 26020.1
Check: MJI

Contractor: Great Works Test Boring
Foreman: Shawn Baker
Logged by: Jeff Rowell
Date Start/Finish: 06-06-97 / 06-06-97
Boring Location: See Site Plan
GS Elev.: NA Datum: NGVD

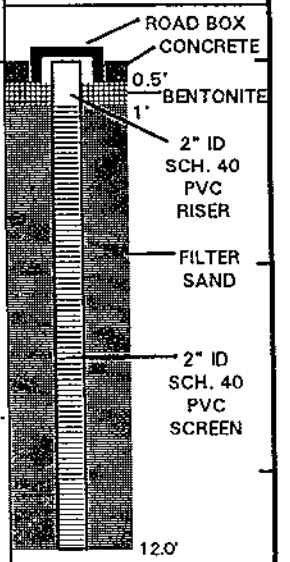
	Auger/ Casing	Sampler
Type:	HSA	SS
O.D. / I.D.:	4-1/4"	2"
Hammer Wt.:	---	140#
Hammer Fall:	---	30"
Other:	---	---

GROUNDWATER READINGS

Date	Time	Depth	Casing	Stab
06-06-97	1300	6.6'	PVC	1 hour

Depth	Casing Blows	Sample Information: No.	Pen/ Rec. (In.)	Depth (Ft.)	Blows (/6")	Field Test Data (ppm)	Sample Description & Classification	Stratum Desc.	Rmks.
		S-1	24/9	0.5-2.5	13-6	ND	Medium dense, brown, fine to coarse SAND, trace Gravel, trace Silt. Dry.	ASPHALT 0.5'	1
					5-6				
								SAND	
5'		S-2	24/12	5-7	9-21	ND	Dense, light brown, fine to coarse SAND, little Gravel, trace Silt. Changing to very dense, olive-brown, fine SAND and Silt. Moist.	6'	2
					27-42			SAND AND SILT	
10'		S-3	0/0	10-12	100/0	---	No recovery.		3
							Auger refusal at 12 feet.		
15'									
20'									
25'									

Equipment Installed



REMARKS

1. Soil samples were screened in the field for volatile organic compounds (VOCs) using a Thermo Environmental, Inc. Model 580B organic vapor detector referenced to an isobutylene-in-air standard. Results are reported in parts per million (ppm) in the "Field Test Data" column. "ND" indicates no VOCs detected.
2. Groundwater was encountered at a depth of approximately 6 feet below ground surface.
3. Auger resistance and split spoon refusal encountered at a depth of 10 feet below ground surface. Augers advanced and auger refusal was encountered at a depth of 12 feet below ground surface.

APPENDIX C

ANALYTICAL LABORATORY REPORT

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

EPA METHOD 602--PURGEABLE AROMATICS

CLIENT: GZA GeoEnvironmental, Inc.
PROJECT NAME: Peters Country Store
CLIENT PROJ. #: 26020.1

DATE RECEIVED: June 6, 1997
REPORT DATE: June 11, 1997
PROJECT CODE: GZAG1566

Ref. #:	105,032	105,033	105,034	105,035	105,036
Site:	GZ-1	GZ-2	GZ-3	GZ-4	GZ-5
Date Sampled:	Not Indicated	Not Indicated	Not Indicated	Not Indicated	Not Indicated
Time Sampled:	11:30	11:00	14:30	12:30	13:00
Sampler:	JDR	JDR	JDR	JDR	JDR
Date Analyzed:	6/10/97	6/10/97	6/10/97	6/10/97	6/10/97
UIP Count:	>10	>10	0	0	>10
Dil. Factor (%):	0.2	20	100	20	1
Surr % Rec. (%):	94	91	93	97	98
Parameter	Conc. (ug/L)	Conc. (ug/L)	Conc. (ug/L)	Conc. (ug/L)	Conc. (ug/L)
Benzene	4,110.	43.7	<1	<5	718.
Chlorobenzene	<500	<5	<1	<5	<100
1,2-Dichlorobenzene	<500	<5	<1	<5	<100
1,3-Dichlorobenzene	<500	<5	<1	<5	<100
1,4-Dichlorobenzene	<500	<5	<1	<5	<100
Ethylbenzene	1,040.	<5	<1	<5	2,870.
Toluene	2,030.	<5	<1	<5	13,000.
Xylenes	3,450.	<5	<1	<5	15,100.
MTBE	22,300.	<50	<10	266.	TBQ <1000

Ref. #:	105,037	105,038	105,039		
Site:	SBC-2	SBC-3	SBC-4		
Date Sampled:	Not Indicated	Not Indicated	Not Indicated		
Time Sampled:	10:30	12:00	13:15		
Sampler:	JDR	JDR	JDR		
Date Analyzed:	6/11/97	6/10/97	6/10/97		
UIP Count:	>10	>10	>10		
Dil. Factor (%):	50	1	0.04		
Surr % Rec. (%):	87	98	98		
Parameter	Conc. (ug/L)	Conc. (ug/L)	Conc. (ug/L)		
Benzene	72.3	1,140.	17,300.		
Chlorobenzene	<2	<100	<2500		
1,2-Dichlorobenzene	<2	<100	<2500		
1,3-Dichlorobenzene	<2	<100	<2500		
1,4-Dichlorobenzene	<2	<100	<2500		
Ethylbenzene	81.5	441.	3,860.		
Toluene	51.2	2,150.	37,600.		
Xylenes	101.	1,920.	24,800.		
MTBE	86.0	3,280.	95,200.		

Note: UIP = Unidentified Peaks TBQ = Trace Below Quantitation NI = Not Indicated

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

EPA METHOD 524.2

CLIENT: GZA GeoEnvironmental, Inc.
PROJECT NAME: Peters Country Store
REPORT DATE: June 20, 1997
DATE SAMPLED: Not Indicated
DATE RECEIVED: June 6, 1997
ANALYSIS DATE: June 20, 1997

PROJECT CODE: GZAG1567
STATION: WS-1
REF. #: 105,040
TIME SAMPLED: 0930
SAMPLER: J.D.R.

Parameter	Detection Limit(ug/L)	Maximum Contaminant Level (ug/L)	Concentration (ug/L)
Benzene	0.5	5.0	ND[1]
Bromobenzene	0.5	------	ND
Bromochloromethane	0.5	------	ND
Bromomethane	0.5	------	ND
n-Butylbenzene	0.5	------	ND
sec-Butylbenzene	0.5	------	ND
tert-Butylbenzene	0.5	------	ND
Carbon tetrachloride	0.5	5.0	ND
Chlorobenzene	0.5	100.	ND
Chloroethane	0.5	------	ND
Chloromethane	0.5	------	ND
(2&4)Chlorotoluene	1.0	------	ND
1,2-Dibromo-3-chloropropane	1.0	0.2	ND
1,2-Dibromoethane	0.5	0.05	ND
Dibromomethane	1.0	------	ND
1,2-Dichlorobenzene	0.5	600.	ND
1,3-Dichlorobenzene	0.5	------	ND
1,4-Dichlorobenzene	0.5	75.0	ND
Dichlorodifluoromethane	0.5	------	ND
1,1-Dichloroethane	0.5	------	ND
1,2-Dichloroethane	0.5	5.0	ND
1,1-Dichloroethene	0.5	7.0	ND
cis-1,2-Dichloroethene	0.5	70.0	ND
trans-1,2-Dichloroethene	0.5	100.	ND
Dichloromethane	1.0	5.0	ND
1,2-Dichloropropane	0.5	5.0	ND

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

REF.#: 105,040

Parameter	Detection Limit(ug/L)	Maximum Contamination Level(ug/L)	Concentration (ug/L)
1,3-Dichloropropane	0.5	------	ND
2,2-Dichloropropane	0.5	------	ND
1,1-Dichloropropene	0.5	------	ND
cis-1,3-Dichloropropene	0.5	------	ND
trans-1,3-Dichloropropene	0.5	------	ND
Ethylbenzene	0.5	700.	ND
Hexachlorobutadiene	0.5	------	ND
Isopropylbenzene	0.5	------	ND
4-Isopropyltoluene	0.5	------	ND
Naphthalene	1.0	------	ND
n-Propylbenzene	0.5	------	ND
Styrene	0.5	100.	ND
1,1,1,2-Tetrachloroethane	0.5	------	ND
1,1,2,2-Tetrachloroethane	1.0	------	ND
Tetrachloroethene	0.5	5.0	ND
Toluene	0.5	1,000.	ND
1,2,3-Trichlorobenzene	0.5	------	ND
1,2,4-Trichlorobenzene	0.5	70.0	ND
1,1,1-Trichloroethane	0.5	200.	ND
1,1,2-Trichloroethane	0.5	------	ND
Trichloroethene	1.0	5.0	ND
Trichlorofluoromethane	1.0	------	ND
1,2,3-Trichloropropane	0.5	------	ND
1,2,4-Trimethylbenzene	0.5	------	ND
1,3,5-Trimethylbenzene	0.5	------	ND
Vinyl Chloride	0.5	2.0	ND
Total Xylenes	1.0	10,000.	ND
MTBE	1.0	------	ND

NUMBER OF UNIDENTIFIED PEAKS: 0

Analytical Surrogate Recovery:

4-Bromofluorobenzene:	96.%
1,2-dichlorobenzene-d4:	91.%

NOTES:

1 None Detected

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

TRIHALOMETHANES BY EPA METHOD 524.2

CLIENT: GZA GeoEnvironmental, Inc.
PROJECT NAME: Peters Country Store
REPORT DATE: June 20, 1997
DATE SAMPLED: Not Indicated
DATE RECEIVED: June 6, 1997
ANALYSIS DATE: June 20, 1997

PROJECT CODE: GZAG1567
STATION: WS-1
REF. #: 105,040
TIME SAMPLED: 0930
SAMPLER: J.D.R.

Parameter	Detection Limit (ug/L)	Maximum Contamination Level (ug/L)	Concentration (ug/L)
Bromodichloromethane	0.5	----	ND[1]
Bromoform	0.5	----	ND
Chloroform	0.5	----	ND
Dibromochloromethane	0.5	----	ND
Total Trihalomethanes		100.	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

ANALYTICAL SURROGATE RECOVERY:

4-Bromofluorobenzene:	96.%
1,2-Dichlorobenzene-d4:	91.%

NOTES:

1 None Detected

GZAG1567

ENDYNE, INC.

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

CHAIN-OF-CUSTODY RECORD

22492

#26020-1 105,032 — 105,040

Project Name: Peters Country Store Site Location: Benson, VT	Reporting Address: 380 Harvey Road Manchester, NH 03103	Billing Address:
Endyne Project Number: GZAG1566	Company: GZA GeoEnvironmental, Inc. Contact Name/Phone #: JDR (603) 623-3600	Sampler Name: JDR Phone #:

Lab #	Sample Location	Matrix	GRAB	COMP	Date/Time	Sample Containers No.	Sample Containers Type/Size	Field Results/Remarks	Analysis Required	Sample Preservation	Rush
105,032	GZ-1				1130				8020		
105,033	GZ-2				1100						
105,034	GZ-3				1430						
105,035	GZ-4				1230						
105,036	GZ-5				1300						
105,037	SBC-2				1030						
105,038	SBC-3				1200						
105,039	SBC-4				1315						
105,040	WS-1				0930				524		

Relinquished by: Signature	Received by: Signature — Joan M. Chandler	Date/Time
Relinquished by: Signature	Received by: Signature	Date/Time

New York State Project: Yes ____ No ____

Requested Analyses

1	pH	6	TKN	11	Total Solids	16	Metals (Specify)	21	EPA 624	26	EPA 8270 B/N or Acid
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	EPA 625 B/N or A	27	EPA 8010/8020
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	EPA 418.1	28	EPA 8080 Pest/PCB
4	Nitrite N	9	BOD_5	14	Turbidity	19	BTEX	24	EPA 608 Pest/PCB		
5	Nitrate N	10	Alkalinity	15	Conductivity	20	EPA 601/602	25	EPA 8240		
29	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)										
30	Other (Specify):										

WHITE COPY - Original | YELLOW COPY - Lab Files | PINK COPY - Project Manager

W.O. # *(for lab use only)*

CHAIN-OF-CUSTODY RECORD

ANALYSES REQUIRED

Sample I.D.	Date/Time (Very Important)	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., Other (specify))	Sample Type (A=Auto, M=Manual, P=Prop, F=Flow, T=Timed, G=Grab, C=Comp)	8020 ☐ 602	S24	Total # of Cont.	Note #
GZ-1	1130			X			
GZ-2	1168			X			
GZ-3	1430			X			
GZ-4	1230			X			
GZ-5	1300			X			
~~SBC-1~~				X			
SBC-2	1030			X			
SBC-3	1200			X			
SBC-4	1315			X			
WS-1	0930				X		

PRESERVATIVE (Cl - HCl, N - HNO_3, S - H_2SO_4, Na - NaOH, O - Other)*

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*

RELINQUISHED BY: (Affiliation)	DATE/TIME	RECEIVED BY: (Affiliation)
	6/6/97 1410	
RELINQUISHED BY: (Affiliation)	DATE/TIME	RECEIVED BY: (Affiliation)
	6/6/97 6:00	
RELINQUISHED BY: (Affiliation)	DATE/TIME	RECEIVED BY: (Affiliation)
RELINQUISHED BY: (Affiliation)	DATE/TIME	RECEIVED BY: (Affiliation)

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4°C)
*Specify "Other" preservatives and container types in this space.

PROJECT MANAGER: JDR EXT:

TURNAROUND TIME: ☐ Standard ☐ Rush ___ Days, Approved by: ___

GZA FILE NO. 26020.1 P.O. N.O. ___

PROJECT PETERS COUNTRY STORE

LOCATION BENSON VT

COLLECTOR(S) JDR SHEET 1 OF 1

LABORATORY ENDYNE PHONE # ___

GZA GeoEnvironmental, Inc.
Engineers and Scientists
380 Harvey Road
MANCHESTER, NH 03103
(603) 623-3600
FAX (603) 624-9463